



## Original Communication

## A unique trend of murder-suicide in the Jamnagar region of Gujarat, India (A retrospective study of 5 years)

B.D. Gupta MBBS, MD (Professor and Head)<sup>a,\*</sup>, O. Gambhir Singh MBBS, MD (Tutor)<sup>b</sup>

<sup>a</sup> Department of Forensic Medicine, M.P. Shah Medical College, Jamnagar 361008, Gujarat, India

<sup>b</sup> Assistant Professor in Forensic Medicine, Sikkim Manipal Institute of Medical Sciences, 5th Mile Tadong, Gangtok, Sikkim 737102, India

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### Abstract

Jamnagar region, Gujarat state, enjoys a relatively low incidence of homicide in India. In the 5 year period from 2000 to 2004, 8 mothers committed 13 murders involving 3 male and 10 female victims and in every case it was followed by suicide of the assailant mothers. During the study the annual incidence of murder-suicide was about 1.8 cases. All the assailants were mothers and the victims were their small children in the age group of 6 months to 7 years. Five incidents took place in rural areas and three in urban areas. It was prevalent only in low socio-economic families. Methods both for killing and suicide were either burning or drowning. All the mothers were legally married and living with the family. Family and family related matters were the main motives for killing. In one case there was history of depression of the mother due to her previous miscarriage. Alcohol consumption or drug abuse was not seen even in a single case. All cases fell in the altruistic category of filicide-suicide.

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### 1. Introduction

Wikipedia, the free encyclopedia, defines ‘murder-suicide’ as an act in which an individual kills one or more other persons immediately before, or while killing himself or herself. However, Milroy<sup>1</sup> defined it as a situation in which the perpetrator commits suicide after killing his victim. So, loosely speaking, in ‘murder-suicide’ there is death of both the victim and the assailant. Murder-suicide deaths, though rare, are universal phenomena reported from all over the world. They are reported from China,<sup>2</sup> Florida,<sup>3</sup> Australia,<sup>4</sup> Cleveland,<sup>5</sup> Finland,<sup>6,7</sup> Hampshire,<sup>8</sup> Central Virginia,<sup>9</sup> Paris<sup>10</sup> and England and Wales,<sup>11</sup> Chicago,<sup>12</sup> Yorkshire and Humberside<sup>13</sup> and Kentucky<sup>14</sup> so on. Previously published papers show that there is less variation in the rates of homicide-suicide though there is a wide variation in the rates of homi-

cide.<sup>1</sup> With a few variations and exceptions they bear a close resemblance with one another. However, the present study reports a unique trends of ‘murder-suicide’ cases experienced in the region of Jamnagar of Gujarat state, India.

### 2. Materials and methods

We reviewed 4152 cases of medico legal autopsies conducted during the period 2000 to 2004 and found 179 cases of homicidal deaths. Out of these 179 homicide cases, there were 8 cases of ‘murder-suicide’ killing 13 children all by their mothers. We excluded cases of dyadic suicides and other cases where the person died accidentally while trying to save suicide of a person. In the present study, suicide of the assailants took place at the same time of the incidents, so it was not necessary to draw a fixed time period for suicide of the assailant. General particulars of these cases were collected from the post mortem report, police inquest, dead body chal-

\* Corresponding author. Tel.: +91 288 2710595.

E-mail address: [bdgijn@yahoo.com](mailto:bdgijn@yahoo.com) (B.D. Gupta).

ian, police investigating officer, available history from the relatives or eye witness, etc., and in few cases from hospital indoor case papers. The significant details were grouped and tabulated for the purpose of obtaining observations. A comparison was made between the observations of available literatures and present study.

### 3. Results

Out of the total 179 cases of homicides there were eight cases murder-suicides involving 13 children victims and 8 mother assailants. It is about 4.47% of all homicides and 0.21% of 4152 medico legal autopsies conducted during the period. Annual incidence of murder-suicide was approximately 1.8 cases. Year wise distribution of cases is shown in Table 1.

At least one case was reported in every year. Highest incidence was observed in 2004 (Table 1).

Highest incidence of dyadic deaths occurred in the month of December with three cases (33.33%). It was also observed in the months of May, August, September and October. Interestingly a relatively higher incidence of homicide was also observed during these months (as shown in Table 2).

Sex wise, female victims outnumbered the male victims with a male female sex ratio of 0.4:1 (as shown in Table 3).

Most commonly involved age group ranges between one and half years to two years, four cases (30.77%) with two extreme ages being 6 months (1 case) and 7 years (2 cases). In cases of male victims majority of the victims were from the age group of 1 to 2 year, three cases, and (23.08%). However, female victims were distributed in a wide range of age (as shown in Table 4).

Majority of the cases were reported from the rural areas with five cases (62.5%) as shown in Table 5.

Table 1  
Year wise distribution of cases

Year	Homicide cases	Murder-suicide cases
2000	51	1
2001	33	1
2002	31	2
2003	25	1
2004	39	3

Table 2  
Month wise distribution of cases

Month	Murder-suicide cases	%
May	1	12.50
August	1	12.50
September	1	12.50
October	2	25.00
December	3	37.50
Total	8	100

Table 3  
Sex wise distribution of victims

Sex	No.	%
Male	3	23.08
Female	10	76.92
Total	13	100

Table 4  
Age wise distribution of victims

Age (years)	Sex		Total	%
	Male	Female		
0–1	0	1	1	7.70
1–2	2	1	3	23.08
2–3	0	1	1	7.70
3–4	0	3	3	23.08
4–5	0	1	1	7.70
5–6	1	1	2	15.38
6–7	0	0	0	0
7–8	0	2	2	15.38
Total	3	10	13	100

Table 5  
Cases distribution according to place of incidence

Place of incidence	No.	%
Rural	5	62.5
Urban	3	37.5
Total	8	100

Table 6  
Cases distribution according to method of killing

Method of killing	No.	%
Drowning	4	50
Burns	4	50
Total	8	100

Table 7  
Cases distribution according to motives

Motive	No.	%
Family	6	75
Dowry	1	12.5
Mental illness	1	12.5
Total	8	100

Drowning or burns was the method of choice in murder-suicide deaths. The assailants also adopted the same method to commit suicide (as shown in Table 6).

Amongst the different motives, family related motives occupied the top position with 6 cases (75%). In one case it was due to depression of the mother (motives are as shown in the Table 7).

### 4. Discussion

Jamnagar region comprises a vast area of rural areas. Population influx and migration are negligible. Assuming

only minor changes in annual population, the average mean death rate for homicide was calculated to be 1.4 per 100,000 population which is comparatively low when it is compared with the national rate: 3.4 per 100,000 population and Gujarat state rate: 2.13 per 100,000 population, respectively. So, Jamnagar region enjoys one of the lowest rates of murder not only in Gujarat state but also in India.

In the present study the rate of ‘murder-suicide’ was found to be 0.06 per 100,000 populations. Every year, at least, there was one case of ‘murder-suicide’. Though there was no specific pattern of incidence it was not receding with the passage of time. As regard to incidence Cohen et al.<sup>3</sup> reported very high rate from 0.3 to 0.7 per 100,000 persons to 0.4 to 0.9 per 100,000 persons in their two groups involving elderly persons. According to them overall incidence in the United States and other countries was also ranged from 0.2 to 0.3 per 100,000 persons. This range of incidence is well supported by many other workers like Campanelli and Gilson<sup>8</sup> who reported the incidence to be 0.26 per 100,000 persons; Hanzlick and Koponen<sup>15</sup> reported the incidence to be 0.46 per 100,000 persons; while Hannah et al. in their two cohorts reported the incidence to be 0.34/100,000 and 0.38/100,000. According to Hannah et al.<sup>9</sup> even the incidence in their study was a bit on higher side as compared to previously published cumulative statistics. Therefore the incidence of 0.06 per 100,000 persons which was found in our study can definitely considered very low as compared to figures world over.

For a better understanding and comparison let’s refer to the classification of homicide-suicide as proposed by Marzuk et al.<sup>16</sup> (MTH typology), (MTH stands for the first letters of the names of the authors – Marzuk, Tardiff and Hirsch) as follows:

#### I. Spousal or consensual

##### Perpetrator

- (a) Spouse
- (b) Consort

##### Type of homicide

- (i) Uxoridial (Spouse killing)
- (ii) Consortial (Killing of lover)

#### II. Familial

##### Perpetrator

- (a) Mother
- (b) Father
- (c) Child (<16 years)
- (d) Other family members

##### Type of homicide

- (i) Neonaticide (Child < 24 hours)
- (ii) Infanticide (Child > 1 day, < year)
- (iii) Pedicide (Child > 1 year, <16 years)
- (iv) Adult family members

#### III. Extra familial

##### Class

- A. Amorous jealousy
- B. Mercy killing

- C. Altruistic or extended suicide
- D. Family, financial or social stressors
- E. Retaliation
- F. Other
- G. Unspecified

If we follow the proposed MTH typology of Marzuk et al.,<sup>16</sup> the present study shows only ‘familial’ type of victim-assailant relationship, in all cases the perpetrator being mothers and victims, their children. There was not a single case of spousal or consortial relationship. In five incidents there were involvement of three people each, the mother and her two children. It loosely fits into the ‘triadic death’ pattern. In the remaining three incidents there were involvement of a mother and a child bearing the ‘dyadic death’ type of pattern. ‘Family annihilator’ or ‘serial killer’ pattern was not seen in the present study.

In the experience of one of the authors (Prof. B.D. Gupta), during his last 25 years of academic carrier, there was one case where a father killed his adolescent daughter (honour killing) before committing suicide. He was against his daughter’s love affairs with a boy. The angered and frustrated father killed his daughter by cutting her throat and then he tried to commit suicide by slitting his throat. To ensure and hasten his death he also resorted to hanging and ultimately he met his death without failure. It was excluded from the present study as it happened in Baroda (Gujarat), where Prof. B.D. Gupta worked for a brief period in the year 2000.

d’Orban<sup>17</sup> described six different groups of mothers who killed their children which were than extended up to 16 by Guileyardo and colleagues.<sup>18</sup> Here we are talking about filicide, a terminology which is used to describe one of the types of murder-suicide in which parents killed their children and then committed suicides. They also came up with many subtypes of filicides bases on motives and causes. Accordingly, there are following 16 subtypes of filicides:

1. Altruism
2. Euthanasia
3. Acute psychosis
4. Postpartum mental disorder
5. Unwanted child
6. Unwanted pregnancy
7. Angry impulse
8. Spouse revenge
9. Sexual abuse
10. Munchausen-by-proxy
11. Violent older child
12. Negligence and neglect
13. Sadism and punishment
14. Drug and alcohol abuse
15. Seizure disorder
16. Innocent bystander.

In our study all cases of murder-suicide fell in the category of filicide. In that too, all of these cases fell in first sub-

type proposed by Guileyardo and colleagues.<sup>18</sup> Altruism is the principal of unselfish concern for the welfare of others (in this case, the children). According to Resnick<sup>19</sup> this is the most common type of filicide. We want to say that in Indian context this is the only type not only of filicide but of incidents of Murder-suicide as well.

During their study Milroy,<sup>1,13</sup> Chan et al.,<sup>2</sup> Cohen et al.,<sup>3</sup> Carcach et al.,<sup>4</sup> Saleva et al.,<sup>6</sup> Campanelli and Gilson,<sup>8</sup> Hannah et al.,<sup>9</sup> Lecomte and Fornes,<sup>10</sup> Barraclough and Harris,<sup>11</sup> Stack,<sup>12</sup> Hanzlick and Koponen,<sup>15</sup> Marzuk et al.<sup>16</sup> and Gowitt and Hanzlick,<sup>20</sup> observed that males were the most common offenders in the murder-suicide cases. Milroy<sup>1</sup> reported the father to be the common perpetrator. Before Milroy's<sup>1</sup> study, West<sup>21</sup> found women to be the most frequent killer of their children during his studies in England. However, the more recent study from England conducted by Milroy<sup>1</sup> has shown similar features to other western studies, with male killers forming the vast majority and their spouse the most frequent victims. Even in cases of filicide-suicide cases the most common perpetrators were males and fathers.<sup>5</sup> Milroy<sup>1</sup> also suggested one general principle that on the whole those countries with higher rates of murder-suicide are those in which the percentage of killing with fire arms is very high. More recent studies of Comstock and his co-authors<sup>22</sup> also observed a similar pattern of male perpetrators dominance and choice of fire arms to be the method of killing during their studies in Oklahoma, USA during the period 1994–2001. This observation is supported by many authors.<sup>4–6,8,10,11,13</sup> However in a Québec study, of 27 mothers who killed their children just over half ( $n = 15$ ) committed suicide.<sup>23</sup> This is in consistency with observations by Byard et al.<sup>24</sup> In their study also there was higher percentage of female perpetrators. However, they also noticed that fathers killed not only their children but also their wives, whereas mothers murdered only their children. The present study bears a close similarity with this study.

In the present study we observed all the perpetrators to be exclusively females, mothers of the victims. There was not a single case in which a female perpetrator kills her spouse before she committed suicide. Here, usually male perpetrators would kill his spouse or children and then escape free or surrender to police. In cases of lovers they would prefer to die together by mutual consent. It is rare that a male lover would first murder her and then commit suicide.

In the present study all the mothers were married and living with their husbands. The majority of the mothers were from the age group 21–30 years hailing from a low socio-economic class. All of them were housewives and illiterate who were fully dependent on their husbands. This is in contrast with the study of Rouge-Maillart et al.<sup>25</sup> who conducted study on 'Women who kill their children' in Angers, France. During their study they observed that majority of the mother assailants having an occupation with an average economic status. We also tend to differ from the observations made by Bourget et al.<sup>26</sup> that such

ficides are usually committed due to illegitimacy or uncertain paternity. In our study these questions were not at all in picture.

The present study did not witness a single case of neonaticide. Infanticide was seen only in one case. This could be explained by the fact that, in general, there is joy and happiness when there is a new arrival in the family. Majority of the victims were from the age group of one and half years to three and half years, average mean age being 2.8 years. So, pedicide was more common in cases of 'murder-suicide' deaths.

In four incidents (50%) the victims were killed by burning. They were either spot dead or brought in dead cases. Post mortem examination reports showed involvement of about 85% to 100% body surface area with a degree of dermo-epidermal type of burns. Kerosene like smell was perceived in majority of the cases. Involvement of a comparatively larger body surface area and degree of burns reflect a deep seated angry, hatred, frustration and helplessness of the assailant. Kerosene oil, match sticks and other inflammable cooking oils are easily available common house hold items in India. So, it is usually preferred by Indian women to commit suicide as well as for killing.

In another four incidents (50%) victims as well as assailants died due to drowning. In the rural areas the place of drowning was a well located near the house in the cultivating field. In the urban area drowning took place in the Lakhota lake, a lake which is situated in the heart of the Jamnagar city. In all cases both the murder and suicide took place at the same place. However, choice of a well or a lake appears to be merely on its easy availability. Probably, drowning avoids a messy bloodshed and a long struggle for both the victim and the assailant.

While in majority of studies on murder-suicide the most common weapon of offence was fire arm. Even in cases of filicide most common weapon of offence was fire arm 70%, though arson 3% and drowning in a car 7% were also mentioned.<sup>5</sup>

We are not very clear about the terminology used by them. What does arson means? Does it differ from the burns which we have used in our observations? Or how does drowning differ than the drowning in a car?

Available post mortem reports of all the 13 victim children and 8 assailant mothers did not show presence of any bodily injury due to physical assault or torture. There was also no evidence of any possible old scars from the past beating. From this we may safely presume that there had been more mental stress and strain rather than the physical torture. In the extreme situation when there was a complete break down of tolerance the assailant mother could not help herself but to kill herself and her children.

So far motive is concerned, western authors observed more or less a similar pattern, the commonest motive being that of jealousy and/or revenge, often as the result of a breakdown in the spousal relationship.<sup>1,2,6</sup> As opposed to the other western countries, the present study shows family

dispute to be the prime motive for murder-suicide. Family disputes involve multiple inter-related problems. Though money occupies the centre-stage of today's life style, mutual trust, understanding and respects amongst the family members are the main pivot of a family. Any disparity in thought, action, attitude and behavior may cause family stress and strain especially between husband and wife. However, we did not see any case of domestic abuse, where a perpetrator killed his or her spouse as the ultimate act of domination, who then committed suicide out of grief or to evade legal consequences. Indian male spouses seem to be more escapist and they act in a peculiar manner too. They would rather prefer 'kill and escape' to 'kill and suicide' theory. So, in the present study we did not see any case of suicide after murder as a form of self-punishment due to guilt.

So, the true motive behind the killing seen in the present study is quite different from the other motives as described by the western authors. Here the motive is neither jealousy and/or revenge. Her actual motive was not to kill her children. It was her motherly love and affection that compelled her to kill her children as she wanted to save them from their dark future where motherly love, affection and shelter would be no more. So, it is more an altruistic or extended type of murder-suicide as per MTH typology of Marzuk et al.<sup>16</sup> which is well supported by other authors.<sup>17,18</sup>

Majority of the western studies suggested alcohol intoxication of the perpetrators to be a significant factor.<sup>1,15</sup> Guileyardo et al.<sup>18</sup> also mention drug abuse and alcohol as one of the subtypes of filicide. But in the present study there was no history of any drug abuse or alcohol consumption of the perpetrator mothers. Due to culture and other social restrictions, Indian woman does not drink alcohol. Moreover, Gujarat is one of the dry states in India where alcohol and other liquors are prohibited by various legal acts. Mental depression of the mother was also seen only in one case.

Indian women have been the forbearer of tolerance and sacrifice since time immemorial. In the present study we find none of the women killing her husband though her life went through a series of miseries. Somewhere from this study too, we could sense the inherent inner beauty and strength of an Indian woman, her unspoken hidden core strength of bearing, suffering, tolerance, patience and yet unrevengeful attitude towards her tormentor. When all means and roads were closed to her, she welcomed her death ultimately.

Many authors including Milroy<sup>27</sup> have come up with one theory or other of reasons of such episodes of murder-suicide but most of such reasons have been speculative and circumstantial, because the perpetrators also died and were not available for interviewing or throwing light on the backgrounds of their acts. In this context, while revising the paper, we came across a study by Brett<sup>28</sup> which describes a series of murder followed by suicide attempts. Here as the perpetrators did not succeed in their attempts to end life they were very much available for interviewing

and further analysis etc. Though this study does not fall directly under the preview of our work but we feel that to know the insight of such offenders better subjects are those who have survived rather than who have accomplished the act.

## 5. Conclusion

When we started the study it was on the lines of murder-suicide but when we completed, it turned out to be more a filicide-suicide study. It differs from various previous studies in various aspects.

- a. We did not find a single case of murder-suicide when the term is used in its conventional sense.
- b. The causes of murder-suicide in our cases were not spousal relationship oriented. But altruistic type.
- c. Females were the perpetrators.
- d. Perpetrators used the same mode to end lives of their victims and themselves.
- e. Firearms were not at all in picture as a weapon of offence.
- f. Though sixteen sub types are mentioned of filicides, our cases fell in only one category that is altruistic variety.
- g. There was no involvement of drug or alcohol.
- h. There was no role of unwanted child or uncertain paternity.
- i. None of the wives killed her husband.

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